INTRODUCTION

A growing concern over loss and fragmentation of big sagebrush (*Artemisia tridentata*) (hereinafter referred to as sagebrush) in western states that support Greater Sage-grouse (*Centrocercus urophasianus*) populations resulted in eight petitions being filed with the Fish and Wildlife Service of the U.S. Department of Interior (FWS) to protect sage-grouse under provisions of the Endangered Species Act (ESA). A summary of these petitions can be found at the following web site: http://nevada.fws.gov/public/petitionsummaryJan04.pdf In December, 2004, the Fish and Wildlife Service ruled that the Greater sage-grouse does not warrant protection under the Endangered Species Act.

Loss of sagebrush in some western states has approached or exceeded 50 percent (Dobler 1994, Knick 1999). Estimates of regional declines in sage-grouse have ranged from 17 to 47% throughout their range and fewer than 2000 breeding males are estimated to inhabit North Dakota (Connelly and Braun 1997; Braun 1998). Recent census data obtained by the ND Game and Fish Department show a decreasing trend in total males counted over the last 25 years while number of sage-grouse males/strutting ground has not changed significantly over the same period (ND Game and Fish Dept. unpublished data).

Purpose of the Plan

The mission of the North Dakota Game and Fish Department is to protect, conserve and enhance fish and wildlife populations and their habitat for sustained public consumptive and appreciative use. The Game and Fish Department operates under a series of legal mandates, comprised of legislation and legislative intent that dictates the Department's responsibilities and its authorities in carrying out these responsibilities. The *Management Plan and Conservation Strategies for Sage-grouse in North Dakota* was developed to fulfill the mission statement as it relates to sage-grouse in North Dakota.

Goal of the Plan

The goal is to provide for long-term conservation and enhancement of sagebrush steppe/mixed-grass prairie habitats in North Dakota in a manner that will support a self-sustaining sage-grouse population, a diversity and abundance of other wildlife species, and human uses.

This plan provides biological information, identifies where information gaps exist and will facilitate data collection required for future management decisions. The plan is meant to be adaptive in allowing for the incorporation of new information into conservation actions that the plan describes and is intended to be flexible enough to adapt to local situations. It establishes a format to achieve objectives established by the plan for both sage-grouse populations and their habitat and to guide local management. It lays out a framework that allows for local and public input that will be instrumental in implementing conservation actions and delineates possible sources for securing funding and resource information related to sage-grouse and their habitats.

This plan will also serve to help the Western Association of Fish and Wildlife Agencies (WAFWA) in their efforts to provide the FWS with information pertinent to evaluation of conservation efforts that are being directed at assuring long term viability of sage-grouse throughout their range.

Several other conservation plans have been developed by individual states to address sage-grouse declines in those states. In developing this plan North Dakota relied heavily on work that those states (particularly Montana and Wyoming) have done and have used those plans as a template for this work.

Given the close proximity and association of sage-grouse populations in North Dakota with populations in Montana and South Dakota this plan attempts to recognize problems and conservation efforts that reflect our local situations but will remain compatible with conservation efforts being implemented in those states.

Elements of the plan as directed by the ESA and the PECE policy

In dealing with the ESA the FWS has established five criteria that it takes into consideration when it receives a petition for listing a species. These criteria are used in analyzing available data and threats to the species. The five categories that the FWS uses to assess populations at risk are:

- 1. Present or threatened destruction, modification, or curtailment of habitat or range;
- 2. Overuse for commercial, recreational, scientific or educational purposes;
- 3. Disease or predation;
- 4. Inadequacy of existing regulatory mechanism;
- 5. Other natural or manmade factors affecting the species continued existence.

In addition, in 2003 the FWS adopted a set of criteria for evaluating conservation plans. This Policy for Evaluation of Conservation Efforts (PECE) was printed in the Federal Register Vol. 68, March 28, 2003. This policy directs that any conservation action that is undertaken under the auspices of a species conservation plan must include an evaluation that will allow the FWS to determine if the action is truly a conservation effort that will be implemented.

In order for a conservation effort to affect the listing decision, PECE requires the FWS to ensure that the effort's implementation is highly probable and will be sufficiently effective. In order to make that evaluation all proposed conservation actions must include the following:

- 1. To assess the certainty that the action will be implemented:
 - A. Describe staffing and funding;
 - B. Describe the legal authority of the parties agreeing to the conservation effort and provide proof of their commitment to proceed;
 - C. Describe any legal procedure that must be followed in order to implement a project and provide proof that the requirements have been met;
 - D. Describe any permits or permission that must be obtained to proceed with the effort and provide information indicating why you think these will be obtained;
 - E. Provide information on who will be participating in the action and estimates of what level of participation is expected;
 - F. Laws needed to implement an action must already be in place;
 - G. Provide information stating why you believe the funding for the action will be forthcoming;
 - H. The action has a schedule to begin and end;
 - I. Proof all parties involved with the action are in agreement to its implementation.
- 2. To assess the effectiveness of the action:
 - A. Describe the nature and extent of the threats and how the action will reduce those threats;
 - B. Describe incremental objectives for the action and dates when they are expected to be attained;
 - C. Identify the steps necessary to implement the action;

- D. Identify the scientific parameters that will be used to monitor progress and how they will be measured;
- E. Provide progress reporting schedules and parameters;
- F. Show that principles of adaptive management are incorporated in the action.

The project must have explicitly stated objectives and dates for achieving them, steps necessary to implement the efforts, and standards for measuring progress. In addition, laws and regulations necessary to implement the conservation effort must be in place and there must be a high level of certainty that funding is available to carry out the project.

MOU's entered into with WAFWA

Growing apprehension about the status of sagebrush steppe, declines in sage-grouse numbers and concern about the long term viability of the species prompted the WAFWA and federal natural resource management agencies to enter into a Memorandum of Understanding (MOU) in July 2000. Under that agreement the western states, the U.S. Forest Service (USFS), the Bureau of Land Management (BLM) and the FWS agreed to cooperatively develop plans for the long term conservation of sage-grouse.

WAFWA Guidelines

The Western Association of Fish and Wildlife Agencies charged a team of biologists to update sage-grouse habitat management guidelines (Braun et al. 1977). The updated guidelines (Connelly et al. 2000) were written to pre-empt, reverse, or mitigate population declines and maintain viable populations of sage-grouse.

The WAFWA guidelines, based on a compilation of literature, describe site conditions required to meet seasonal habitat needs of sage-grouse. However, the guidelines do not describe a desired condition for habitat on a landscape scale, plant composition, and structural characteristics across all sagebrush communities in which sage-grouse occur. For that reason, some federal agencies are currently developing a strategy to assess landscapes, meet WAFWA guidelines for sage-grouse, support communities of other animals that use sagebrush habitats, and prescribe management strategies at multiple scales.

The guidelines acknowledge information gaps and regional variation in habitat structure and composition and suggest that local biologists apply quantitative data from habitat and population monitoring to address local conditions. This planning process has considered the WAFWA guidelines as a technical reference to develop conservation strategies that will maintain or enhance sage-grouse populations and habitat.

Federal agencies have agreed to incorporate sage-grouse guidelines when authorizing any activities or revising land use and activity plans in areas where sage-grouse are known to occur. An Interagency Steering Committee representing BLM and USFS has been formed to address sagebrush habitat and conservation planning issues across federal and state boundaries and develop a consistent approach for incorporating conservation needs into federal land management plans.

Literature Cited:

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